

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1. (Currently amended) A waveguide comprising:
a waveguide core having a bottom surface and a top surface that defines an angle; and
a cladding layer adjacent to the bottom surface, the cladding layer having a thickness
equal to or greater than an evanescent tail of a mode to be transmitted along the wave guide core.

01 Claim 2. (Original) The waveguide of claim 1, wherein the angle is at least equal to an
angle of total internal reflection of the waveguide core.

Claim 3. (Original) The waveguide of claim 1, wherein the waveguide core defines a
beveled mirror.

Claim 4. (Original) The waveguide of claim 1, further comprising:
a phototransistor having a base,
wherein the waveguide core is coupled to the base of the phototransistor.

Claim 5. (Original) The waveguide of claim 4, wherein the waveguide core defines a
beveled mirror.

Claim 6. (Currently amended) The waveguide of claim 5, wherein the waveguide core is
disposed over a substrate and the beveled mirror directs a the mode propagated through the
waveguide core into the substrate.

Claim 7. (Original) The waveguide of claim 1, further comprising:
a photodiode having an n-type region, an intrinsic layer region, and a p-type region,
wherein the waveguide core is coupled to the intrinsic layer region of the photodiode.

Applicant : Paul Davids et al.
Serial No. : 10/085,474
Filed : February 26, 2002
Page : 3 of 6

Attorney's Docket No.: 10559-682001
Intel Corporation Docket No.: P13240

Can be added
Claim 8. (Original) The waveguide of claim 7, wherein the waveguide core defines a beveled mirror.

Claim 9. (Original) The waveguide of claim 8, wherein the waveguide core is disposed over a substrate and the beveled mirror directs a mode propagated through the waveguide core into the substrate.

Claims 10 to 30 (Withdrawn)
